

## ULTRASOUND SYSTEM

## ABSTRACT OF THE DISCLOSURE

[0037] An ultrasound system includes an ultrasound probe configured for sensing and transmitting ultrasound signals. The ultrasound system further includes an optical conduit configured for coupling a light source and an optical detector in an optical path. The optical conduit includes electro-optic modulators configured for modulating optical signals on the optical conduit with at least one of the electrical signals configured to generate corresponding optically modulated analog signals on the optical conduit. In one example, the electro-optic modulators comprise electro-optic polymer modulators.